

## Fire Probe Deployment Guide:

### Device deployment:

**Step 1:** The data loggers should either be logging data or set-up to start at a determined time. If you do not know how to do this, see “MadgeTech 4 Software User Guide.”

**Step 2:** The device should be transported into the field with the thermocouple probes retracted into the case. If this is not the case, the insulation can be removed and carried separately (see Figure 1).



Figure 1. Probe with insulation not inside to carry the probe.

**Step 3:** Find a good location for the fire probe. Dig a hole a few inches wider than the case and a few inches deeper than the case is tall (see Figure 2).



Figure 2. A hole over 4 inches wide and 12 inches deep.

**Step 4:** Make one face of the hole flat (see Figure 3).



Figure 3. A hole with one face flat.

**Step 5:** Remove the top cap from the fire probe (see Figure 4).



Figure 4. Cap removed from the probe.

**Step 6:** Deploy the thermocouples by grabbing them with one hand and pushing them out of the outer case (see Figure 5).



Figure 5. A hand deploying the probes.

**Step 7:** Place the insulation behind the thermocouple rack to keep it from retracting.



Figure 6. Insulation keeping the probes from coming back in.

**Step 8:** Replace the top cap on the device (see Figure 7).



Figure 7. Cap replaced on the probe with the thermocouples deployed.

**Step 9:** Place the device into the hole with the thermocouples positioned towards the flat face of the hole (see Figure 8).



Figure 8. Probe in the ground facing flat face.

**Step 10:** Press the thermocouples into the ground (making sure the soil they are in is naturally packed soil) by pushing on the other side of the device (see Figure 9).





Figure 9. Pushing the probes into the dirt by hand.

**Step 11:** Backfill the hole making sure not to move the device (see Figure 10).



Figure 10. Probe back filled in all except top of cap.

**Step 12:** Cover the top of the device with very little soil, less than one centimeter of soil (see Figure 11).



Figure 11. Probe entirely covered by dirt.